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17 October 2018

Kansas City Board of Public Utilities
540 Minnesota Avenue
Kansas City, KS 66101

Attention: Ingrid Setzler, Director of Environmental Services

Subject: Nearman Creek CCR Bottom Ash Surface Impoundment
Location Restriction, CCR Rule, 40 CFR §257.61 Wetlands

Conclusion:

The CCR Rule 40 CFR §257.61 - Wetlands was reviewed by a Black & Veatch Natural Resources Biologist to determine if the Nearman Creek Power Station's Bottom Ash Surface Impoundment is located in wetlands, as defined in 40 CFR §232.2 - Definitions. The Bottom Ash Surface Impoundment, which was designed and is operating as a closed-loop system under permit authority of Kansas Department of Health and Environment (KDHE), is not considered a water of the U.S., and thus not a federally regulated wetland. The wetland location restriction was reviewed in regard to the potential presence of U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory features noted to occur adjacent to the Bottom Ash Surface Impoundment. The review concluded that the continued operation of the Bottom Ash Surface Impoundment meets the requirements of paragraphs (a)(1) through (5) in 40 CFR §257.61 – Wetlands.

Wetlands Location Restriction Evaluation:

The Nearman Creek Power Station is located within the alluvial valley of the Missouri River, Wyandotte County, Kansas. The power generation site is encompassed by an earthen-capped levee, owned and maintained by the Kansas City Board of Public Utilities (KCBPU), which protects the site and attendant facilities from potential flooding. Levee crest elevation is 770 feet Above Sea Level (ASL). This levee runs contiguous with the western side of the impoundment, though the impoundment berm has a closeout/crest elevation of 763 feet ASL. According to the FEMA FIRM Panel (Map Number 20209C0065D), the power generation site occurs in Zone X, and the impoundment and adjacent unprotected cropland occurs in a special flood hazard area, notably the 100-year floodplain of the Missouri River. A designated floodway, with elevations established, parallels the Missouri River and follows the northern portion of the levee.

The impoundment began operation in 1980 and is currently in service. The CCR is wet-sluiced, and the sluicing activity is designed as a closed-loop (no discharge) in which decanted water can be recycled for the wet-sluicing delivery process. The impoundment is designed to store the CCR above the elevation of the surrounding alluvial plain, and operate as a no discharge, regulated surface impoundment under permit authority of the KDHE. Black & Veatch has determined that the

impoundment is not considered a water of the U.S., and thus not a federal regulated wetland based on the following:

Per 40 CFR §232.2 – Definitions:

(2) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (1)(iv) through (viii) of this definition.

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act are not waters of the United States.

Furthermore, the state of Kansas does not have any statutes concerning the regulation of wetlands not otherwise regulated under the Federal Clean Water Act and current Environmental Protection Agency definitions of waters of the U.S.

Based on review of USFWS National Wetlands Inventory (NWI) data, the Bottom Ash Surface Impoundment is adjacent to a variety of NWI features labeled as emergent (PEM), scrub-shrub (PSS), and forested wetlands (PFO) (see attached map). Black & Veatch interprets the Wetland Location rule review to be performed in regard to the location of the impoundment and any adjacent wetlands. Therefore, Black & Veatch also evaluated the impoundment based on the requirements for paragraphs (a)(1) through (a)(4) of the 40 CFR §257.61 as listed below.

(a)(1) Where applicable under section 404 of the Clean Water Act or applicable state wetlands laws, a clear an objective rebuttal of the presumption that an alternative to the CCR unit is reasonably available that does not involve wetlands.

Response: The bottom ash pond is an existing facility and its continued operation will not have direct impacts to wetlands. An alternatives analysis, typically required for Section 404 U.S. Department of the Army Dredge and Fill permits is not applicable to this situation.

(a)(2) The construction and operation of the CCR unit will not cause or contribute to any of the following:

(i) A violation of any applicable state or water quality standard

Response: The existing surface impoundment is in compliance with KDHE state water quality standards per the NPDES permit and KDHE Bureau of Waste Management (BWM) permit number 0413 regarding groundwater monitoring and no violations are known at this time regarding the contamination of any wetlands adjacent to the surface impoundment.

(ii) A violation of any applicable toxic effluent standard or prohibition under section 307 of the Clean Water Act

Response: The Bottom Ash Surface Impoundment is a closed-loop CCR pond, and the impoundment is not designed to discharge effluent.

(iii) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act (ESA) of 1973

Response: The only known ESA listed species with potential to occur in the vicinity of the surface impoundment is the pallid sturgeon (Scaphirhynchus albus), a federally-listed endangered species of fish which is known to inhabit the Missouri River. Based on current operating conditions of the Bottom Ash Surface Impoundment, there are no affects to the pallid sturgeon. No critical habitat rules have been published for the pallid sturgeon.

(iv) A violation of any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary

Not applicable.

(a)(3) The CCR unit will not cause or contribute to significant degradation of wetlands by addressing all of the following factors:

(i) Erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the CCR unit

Response: The Bottom Ash Surface Impoundment has a stabilized berm, armored with rip-rap on the side facing the Missouri River. There are no known erosion or stability issues with the berm. No native wetland soils or muds are used to support the operation of the CCR unit.

(ii) Erosion, stability, and migration potential of dredged and fill materials used to support the CCR unit

Response: The Bottom Ash Surface Impoundment has a stabilized berm, armored with rip-rap on the side facing the Missouri River. There are no known erosion or stability issues with the berm. No dredged or fill materials are used to support the operation of the CCR unit.

(iii) The volume and chemical nature of the CCR

Response: The Bottom Ash Surface Impoundment is approximately 21.5 acres, and can accommodate an estimated 170,000 cubic yards of CCR, consisting of coal combustion bottom ash.

(iv) impacts on fish, wildlife, and other aquatic resources and their habitat from release of CCR

Response: The Bottom Ash Surface Impoundment is a closed-loop CCR impoundment, and impoundment is not designed to discharge into any adjacent wetlands.

(v) The potential effects of catastrophic release of CCR to the wetland and the resulting impacts on the environment

Response: The Bottom Ash Surface Impoundment is not with an unstable area, fault area, or seismic impact zone and a catastrophic release of CCR is not anticipated. However, due to the proximity of adjacent NWI features, a catastrophic release of CCR from the impoundment would likely impact these features. Depending on the nature of the release, restoration would likely be required in the event of a catastrophic release.

(vi) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected

Response: Weekly and monthly inspections are conducted on the Bottom Ash Surface Impoundment to ensure it is operating as designed. In addition, annual inspections are also conducted by a Professional Engineer.

(a)(4) To the extent required under section 404 of the Clean Water Act or applicable state wetland laws, steps have been taken to attempt to achieve no net loss of wetlands…

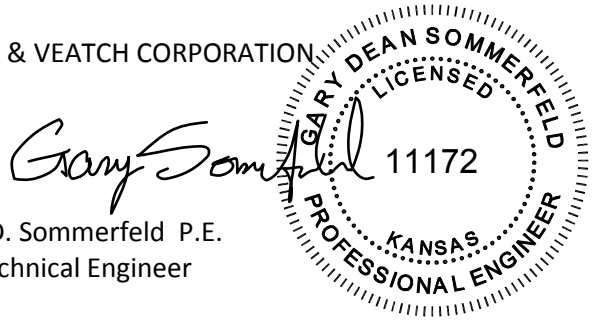
Response: A no net-loss review, typically required for Section 404 U.S. Department of the Army Dredge and Fill permits is not applicable to this situation.

Certification Statement

This evaluation meets the requirements of CCR Rule paragraph (a) §257.61 Wetlands.

Very truly yours,

BLACK & VEATCH CORPORATION



10/17/2018

Gary D. Sommerfeld P.E.
Geotechnical Engineer

Attachment

cc: File
Fred Freeland
Jim Liljegren

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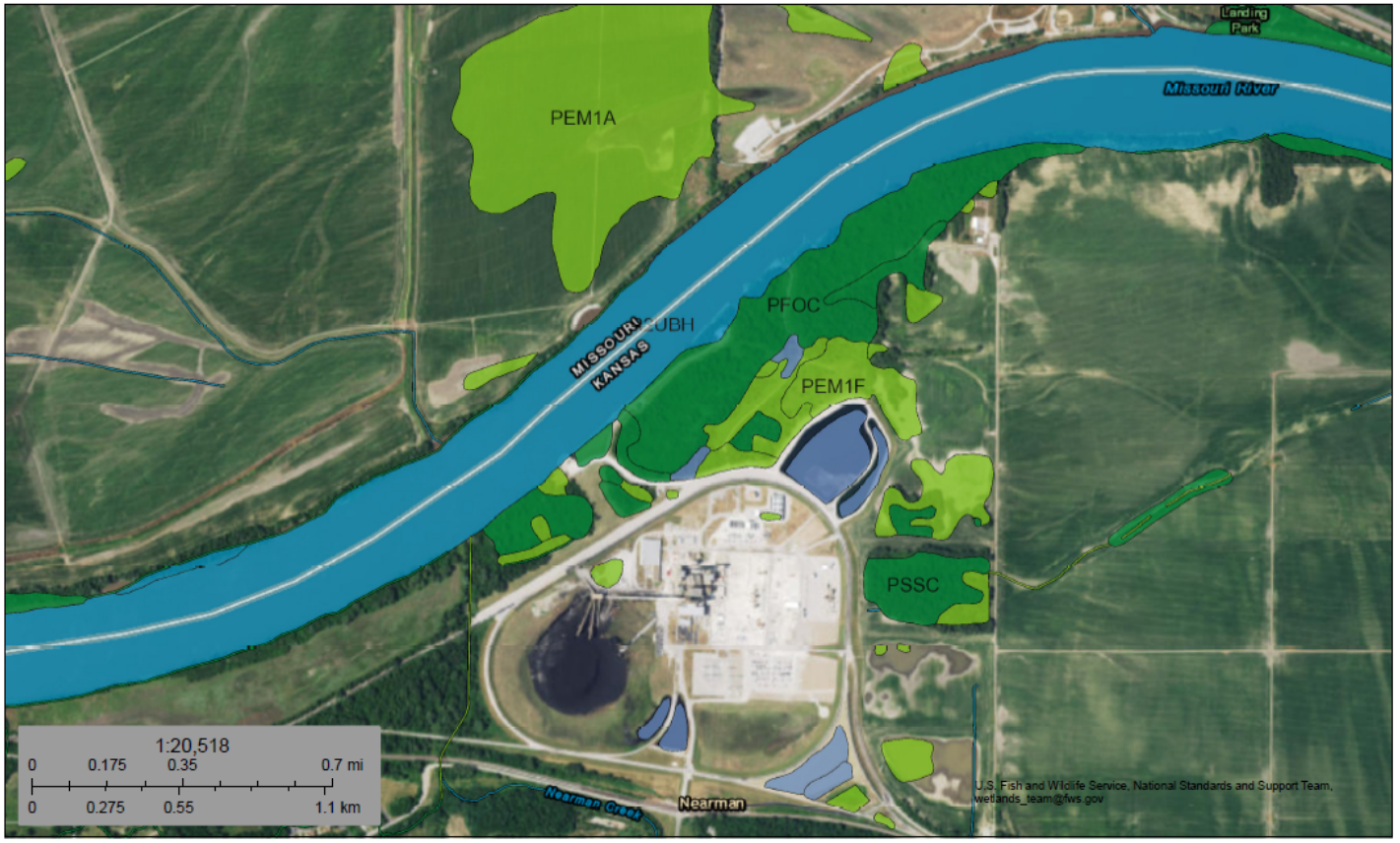
U.S. Fish and Wildlife Service
National Wetlands Inventory

CCR rule review



July 27, 2017

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Attachment - Output from NWI Website https://www.fws.gov/wetlands/data/Mapper.html, accessed July 27, 2017